Richard Scott Poethig

**Education**

B.A., 1974; College of Wooster, Wooster, OH

M. S., 1977; Ph.D., 1981; Yale University, New Haven, CT

**Employment**

1981 Postdoctoral fellow with Dr. P.B. Green, Stanford University

1981-1983 Postdoctoral fellow with Dr. E. H. Coe, University of Missouri

1983-1989 Assistant Professor, University of Pennsylvania

1989-1996 Associate Professor, University of Pennsylvania

1996- Professor, University of Pennsylvania

2002-2007 Paul C. Williams Family Chair, University of Pennsylvania

2008-2014 Patricia M. Williams Chair, University of Pennsylvania

2014- John B. and Margaret H. Fassitt Chair, University of Pennsylvania

**Honors and Fellowships**

Phi Beta Kappa, 1974

NSF Predoctoral Fellowship, 1975-1979

Nicholas Prize in Experimental Biology, Yale University, 1981

Pelton Award, Botanical Society of America, 1993

Fellow, American Association for the Advancement of Science, 2002

Lindback Award for Distinguished Teaching, 2011

G.E. Blackman Lecture, Oxford University, 2013

Member, U.S. National Academy of Sciences, 2014

Christopher Clavius Award, St. Joseph's University, 2017

**Professional Activities**

Review Panels and Scientific Advisory Committees

USDA-CRGO, Plant Growth and Development, 1988-1991

NSF Developmental Mechanisms Program, Committee of Visitors, 1993

DOE Energy Bioscience Program, program review committee, 1994

NSF Faculty Fellows Review Committee, 1996

NSF Developmental Mechanisms Program, 1998, 2001, 2003, 2004, 2007, 2008, 2009

Member, Advisory Committee, NSF Maize Gene Discovery Project, 2000-2003

NSF Plant Genome Program, 2005

Chair, Advisory Committee, NSF Maize Sequencing Project, 2003-2005

Member, North American Arabidopsis Steering Committee, 2007-2011

Life Sciences Research Foundation, 1988-present

Member, NIH Development 1 Study Section 2016 – present

Member, NSF IOS Committee of Visitors, 2018

Editorial Boards

*International Journal of Plant Sciences*, 1991-1998

*Development*, 1989-1998

*The Plant Journal*, 1991- 2003

*Annual Review of Cell and Developmental Biology*, 1999-2004

*Developmental Biology*, 2001-2011,(Associate Editor; 1993-1995)

*Wiley Interdisciplinary Reviews in Developmental Biology*, Associate Editor (2011-2016)

*Genetics,* Associate Editor(2012-2018 )

**Publications**

Green, P. B. and R. S. Poethig (1982) Biophysics of the extension and initiation of plant organs. In: *Developmental Order: Its Origin and Regulation* (S. Subtelny and P.B. Green, eds.), A.R. Liss, NY, pp. 485-509

Coe, E. H. and R. S. Poethig (1982) Genetic factors affecting plant development. In: *Maize for Biological Research.* ( W.F. Sheridan, ed.), Plant Mol. Biol. Assn., Virginia, pp. 295-300.

Poethig, R. S. (1982) Maize: the plant and its parts. In: *Maize for Biological Research.* ( W.F. Sheridan, ed.), PlantMol. Biol. Assn., Virginia, pp. 9-18.

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Poethig, R. S. (1984) Patterns and problems in angiosperm leaf morphogenesis. In: *Pattern Formation*  (S. Bryant and G. Malacinski, eds.), MacMillan Co., NY, pp. 413-432.

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Poethig, R. S. and I. M. Sussex (1985) The cellular parameters of leaf development in tobacco: a clonal analysis. Planta 165: 170-184.

Poethig, R. S. (1985) Homeotic mutations in maize. In: *Plant Genetics*. (M. Freeling, ed) UCLA Symp.Mol.Cell Biol. 35: 33-43.

Poethig, R. S., E. H. Coe, Jr. and M. M. Johri (1986) Cell lineage patterns in maize embryogenesis: a clonal analysis. Developmental Biology 117: 392-404.

Poethig, R. S. (1987) Clonal analysis of cell lineage patterns in plants. Amer. J. Bot. 74: 581-594.

Poethig, R. S. (1988) Heterochronic mutations affecting shoot development in maize. Genetics 119: 959-973.

Poethig, R.S. (1988) A non-cell-autonomous mutation regulating juvenility in maize. Nature: 336: 82-83.

McDaniel, C. N. and R. S. Poethig (1988) Cell-lineage patterns in the shoot apical meristem of the germinating maize embryo. Planta 175: 13-22.

McDaniel, C.N. and R.S. Poethig. (1989) From here to there in maize: a fate map of the shoot apical meristem of the germinating corn embryo. In: *The Molecular Basis of Plant Development*, (R. Goldberg, ed.), UCLA Symp. Cell Mol. Biol.(NS) 92: 3-11

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Poethig, S. (1989) Genetic mosaics and cell lineage analysis in plants. Trends Genet. 5: 273-277.

Becraft, P.W., D.K. Bongard-Pierce, A. W. Sylvester, R. S. Poethig and M. Freeling (1990) The *liguleless-1* gene acts tissue specifically in maize leaf development. Dev. Biol. 141:220-232.

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Dudley, M. and R.S. Poethig. (1991) The effect of a heterochronic mutation, *Teopod 2*, on the cell lineage of the maize shoot. Development 111: 733-739

Dolan, L. and R. S. Poethig. (1991) Genetic analysis of leaf development in cotton. Development (Suppl) 1: 39-46

Bassiri, A., E. E. Irish, and R. S. Poethig (1992) Heterochronic effects of *Tp2* on the growth and photosensitivity of the maize shoot. Plant Cell 4: 497-504

Dudley, M. and R. S. Poethig (1993) The heterochronic *Teopod1* and *Teopod2* mutations of maize are expressed non-cell-autonomously. Genetics 133: 389-399

Conway, L. and R. S. Poethig (1993) Heterochrony in plant development. Sem. Dev. Biol. 4: 65-72.

Dudley, M. and R. S. Poethig (1993) Clonal analysis in plants. In: *Cellular Interactions in Development: Practical Approach Series.* (D. Hartley, ed) Oxford U. Press. pp. 59-75.

Dolan, L., K. Janmaat, V. Willemsen, P. Linstead, R. S. Poethig, K. Roberts and B. Scheres (1993) The cellular organization of the *Arabidopsis* root. Development 119: 71-84

Barton, M. K. and R. S. Poethig (1993) Formation of the shoot apical meristem in *Arabidopsis thaliana*: an analysis of development in the wild type and in the *shoot meristemless* mutant. Development 119: 823-831

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Dolan, L., C. M. Duckett, C. Grierson, P. Linstead, K. Schneider, E. Lawson, C. Dean, R. S. Poethig, K. Roberts (1994) Clonal relationships and cell patterning in the root epidermis of Arabidopsis. Development 120: 2465-2474.

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Evans, M. M. S. and R. S. Poethig (1995) Gibberellins promote vegetative phase change and reproductive maturity in maize. Plant Physiology 108: 475-487.

Lawson, E. and R. S. Poethig (1995) Shoot development in plants: time for a change. Trends Genet. 11: 263-268.

Bongard-Pierce, D., M. M. S. Evans, and R. S. Poethig (1996) Heteroblastic features of leaf anatomy in maize and their genetic regulation. Intl. J. Plant Sci. 157:331-340

Telfer, A., K. M. Bollman and R. S. Poethig (1997) Phase change and the regulation of trichome distribution in *Arabidopsis thaliana*. Development 124: 645-654

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